



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,307	07/01/2003	Akihiro Matsuda	10873.352USRE	3972
53148	7590	09/13/2007	EXAMINER	
HAMRE, SCHUMANN, MUELLER & LARSON P.C. P.O. BOX 2902-0902 MINNEAPOLIS, MN 55402			DICKEY, THOMAS L	
			ART UNIT	PAPER NUMBER
			2826	
			MAIL DATE	DELIVERY MODE
			09/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

TH

Office Action Summary	Application No.	Applicant(s)	
	10/611,307	MATSDUDA ET AL.	
	Examiner	Art Unit	
	Thomas L. Dickey	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 August 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 15-18 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 18 July 2005 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. 09/209,214.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2826

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/20/2007 has been entered.

Issues under 35 USC §251 and 37 CFR §1.171 et seq.

2. Applicants' executed substitute reissue oath was received on 04/20/2007. It is noted that Applicants identify two separate errors. Firstly, Applicants assert that original claims 1-5 may have claimed "more than I was entitled to claim." Cancellation of claims 1-5 apparently moots this.

Applicants further assert it was error to fail to "claim adequately certain aspects of my invention, particularly aspects of the semiconductor element and dummy semiconductor element areas of col. 5 and Fig. 5 of the original patent." Applicants do not state whether the claiming of these aspects will constitute a broadening amendment to the claims. In context, however, it appears that Applicants believe the original claims

Art Unit: 2826

might not cover some embodiments disclosed by said "aspects of the semiconductor element and dummy semiconductor element areas of col. 5 and Fig. 5 of the original patent."

A claim covering some subject matter (even subject matter that is a trivial or obvious variation of originally claimed subject matter, so long as the original claims do not literally read on it) not covered by the original claims is a broadening claim, and the Examiner has proceeded on the assumption that Applicants intend claims 15-18 to be "broadening," according to this definition. Note that the examiner has not assessed whether the new claims are more expansive (should one wish to compare the actual amount of subject matter covered by the new claims to the actual amount of subject matter covered by originally issued claims 1-5) than original claims 1-5. "Breadth," as used here, is not synonymous with "expanse." Nor has the Examiner made an assessment of the number of embodiments that might be covered by both new claims 15-18 and original claims 1-5.

It is the fact that Applicants apparently intend their new claims to cover some aspects (even seemingly trivial or obvious variations of aspects covered by the original claims) of the invention not covered by the original claims that leads the Examiner to the conclusion that the claiming of "aspects of the semiconductor element and dummy semiconductor element areas of col. 5 and Fig. 5 of the original patent," may lead to broadened claims.

Art Unit: 2826

3. Applicants have summarily cancelled claims 1-5 of this Application by the listing "1-14. Cancelled."

Claims 1-5, however, were part of originally issued Patent No. 6,320,214; upon this reissue application is based. Should Applicant cancel any subject matter published in the originally issued Patent, Rule 173(d)(1) dictates the form Applicant must use: "(1) The matter to be omitted by reissue must be enclosed in brackets." 37 CFR 1.173(d)(1). To cancel an originally issued claim, Applicants should simply write out the claim exactly as it appeared in the issued patent and completely enclose it in brackets.

Applicant's attention is drawn to the claims of US RE39,221, published by this Office in August 2006. Applicants will note extensive changes (relative to the originally issued patent upon which this reissue is based) made in the claims. These changes are cognizable because that applicant properly followed Rule 173 in filing his claim set. Because that applicant properly followed the rule, Publications Branch (which relies on applicants for the text of the patents it publishes) was able to properly re-issue that patent.

Applicant's claim set, as filed, will form the basis for Applicant's reissue patent, as published. For this reason Applicant's failure to follow Rule 173 is an absolute deal-breaker as far as allowance is concerned. Should Applicant present allowable claims, prosecution may close, but this reissue application will not pass to issue until Applicant complies with Rule 173.

Art Unit: 2826

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jones et al. (5,696,394) in view of Iwasa (5,361,234).

In *Ex parte CAROLYN RAMSEY CATAN*, 83 USPQ2d 1569 (Bd. Pat. App. & Int. 2007, PRECEDENTIAL); an expanded panel of the Board of Appeals had the opportunity to discuss recent holdings, found in *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 82 USPQ2d 1385 (2007), concerning the obviousness of combinations such as the one Applicants claim. The panel began with the *Graham v. John Deere* analysis:

The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, (3) the level of skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966). See also *KSR*, 127 S.Ct. at 1734, 82 USPQ2d at 1391 ("While the sequence of these questions might be reordered in any particular case, the [Graham] factors continue to define the inquiry that controls.") The Court in *Graham* further noted that evidence of secondary considerations, such as commercial success, long felt but unsolved needs, failure of others, etc., "might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." 383 U.S. at 18, 148 USPQ at 467.

Ex parte CATAN, 83 USPQ2d at 1572. The panel then explained,

In *KSR*, the Supreme Court emphasized "the need for caution in granting a patent based on the combination of elements found in the prior art," [127 S.Ct.] at 1739, 82 USPQ2d at 1395, and discussed circumstances in which a patent might be determined to be obvious without an explicit application of the teaching, suggestion, motivation test.

Art Unit: 2826

In particular, the Supreme Court emphasized that "the principles laid down in *Graham* reaffirmed the 'functional approach' of *Hotchkiss*, 11 How. 248." *KSR*, 127 S.Ct. at 1739, 82 USPQ2d at 1395 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12, 148 USPQ 459, 464 (1966) (emphasis added)), and reaffirmed principles based on its precedent that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.*

Id. at 1573 The panel quoted *KSR* for the principles that

When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, §103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

Id., quoting *KSR v. Teleflex*, 127 S.Ct. at 1740, 82 USPQ2d at 1396. The panel then explained, "The operative question in this 'functional approach' is thus 'whether the improvement is more than the predictable use of prior art elements according to their established functions'" *Id.*

The panel cautioned that the question of whether the claimed invention is no more than a "predictable use of prior art elements according to their established functions" must be based on factual determinations requiring explicit findings on the Examiner's part. The panel stated, "[t]o facilitate review, [the Examiner's] analysis should be made explicit." *Id.* The panel went on to cite *In re Kahn* for the principle that "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *Id.*, quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006).

Art Unit: 2826

It is necessary, as the Catan panel points out, to begin with the factual findings required by *Graham*. Jones et al. discloses a semiconductor device comprising a substrate (not shown in the figures but described at column 8 line 56) and a multilayer 114-106-115-107-117-118 formed on the substrate, the multilayer 114-106-115-107-117-118 comprising a plurality of semiconductor elements 122-124 and a semiconductor element area 120 on the substrate, which includes the plurality of semiconductor elements 122-124; wherein each of the plurality of semiconductor elements 122-124 includes a capacitor 105 (seen in detail in figure 14) which is comprised of a bottom electrode 106, a first dielectric layer 115 on the bottom electrode 106 and a top electrode 107 on the first dielectric layer 115, and the first dielectric layer is composed of a ferroelectric material selected from $\text{SrBa}_x\text{Ta}_x\text{O}_y$, $\text{Ba}_x\text{Sr}_{1-x}\text{TiO}_x$, $\text{Pb}(\text{Zr}_{1-x}\text{Ti}_x)\text{O}_3$, $\text{SrBi}_2(\text{Ta}_{1-x}\text{Nb}_x)_2\text{O}_9$, or $\text{Bi}_4\text{Ti}_3\text{O}_{12}$. Note figures 14, 15, column 8 lines 51-67, column 9 lines 1-40, and column 10 lines 47-55 and 60-67 of Jones et al. The difference between the semiconductor device disclosed by Jones et al. and the claimed device is that Jones et al. does not disclose that the semiconductor element area is surrounded by a plurality of dummy semiconductor elements, each of the plurality of dummy semiconductor elements including a dummy capacitor which is comprised of a dummy bottom electrode, a second dielectric layer composed of the same material as the first dielectric layer, formed on the dummy bottom electrode, and a dummy top electrode on the second dielectric layer, wherein each of the plurality of dummy semiconductor

Art Unit: 2826

elements is located so that a space between the electrode and the dummy electrode is in a predetermined range between 0.3 μm and 14 μm .

However, Iwasa discloses a stacked capacitor memory cell array with a semiconductor element area ("memory cell area") ~~is~~ surrounded by (note, column 6 lines 6-10, that "dummy memory cells arranged at the adjacent portion to the boundary area between the memory cell array area and the peripheral circuit area), a plurality of dummy semiconductor elements, each of the plurality of dummy semiconductor elements including a dummy capacitor ~~which is~~ comprised of a dummy bottom electrode 106d, a second dielectric layer 107 composed of the same material as the first dielectric layer 107, formed on the dummy bottom electrode 106d, and a dummy top electrode 108 on the second dielectric layer 107, wherein each of the plurality of dummy semiconductor elements is located so that a space between the electrode and the dummy electrode is about 0.3 μm ("approximately 300 nanometers"). Note figures 2A-2B, column 6 lines 1-25, and column 7 lines 4-34 of Iwasa. Iwasa discloses that the dummy capacitors surround the semiconductor element (read "memory cell" in Iwasa's and Jones et al's devices) area in order to assure that the passivated surface of outer regions of the semiconductor element area is just as flat as the surface of the inner regions thereof. Iwasa et al. explain that, having occupied the outer, boundary regions around the semiconductor element area, "The dummy capacitor is to receive afflictions caused by an inferiority of the accuracy of patterning by a photolithography in

Art Unit: 2826

replacement of the operational memory cells." Note Abstract. Although one must use a little imagination to envision what such "affections" may be, they are clearly not something a memory cell designer would wish his operational cells to undergo.

Iwasa thus discloses that those of skill in the art were familiar with a method of surrounding a semiconductor element area with a plurality of dummy semiconductor elements, each of the plurality of dummy semiconductor elements including a dummy capacitor which is comprised of a dummy bottom electrode, a second dielectric layer composed of the same material as the first dielectric layer formed on the dummy bottom electrode, and a dummy top electrode on the second dielectric layer, in a stacked capacitor memory cell array, a device very similar to Jones et al.'s semiconductor device. From the similarities between the stacked capacitor memory cell array and Jones et al.'s semiconductor device, one of skill in the art would have been able to conclude that a method of surrounding a semiconductor element area with a plurality of dummy semiconductor elements, each of the plurality of dummy semiconductor elements including a dummy capacitor which is comprised of a dummy bottom electrode, a second dielectric layer composed of the same material as the first dielectric layer (note that applied to Jones et al.'s semiconductor device, this suggests the second dielectric layer should be formed as the first is, of a ferroelectric material selected from $\text{SrBa}_x\text{Ta}_x\text{O}_y$, $\text{Ba}_x\text{Sr}_{1-x}\text{TiO}_x$, $\text{Pb}(\text{Zr}_{1-x}\text{Ti}_x)\text{O}_3$, $\text{SrBi}_2(\text{Ta}_{1-x}\text{Nb}_x)_2\text{O}_9$, or $\text{Bi}_4\text{Ti}_3\text{O}_{12}$), formed on the dummy bottom electrode, and a dummy top electrode on the second dielectric layer,

Art Unit: 2826

wherein each of the plurality of dummy semiconductor elements is located so that a space between the electrode and the dummy electrode is in a predetermined range between 0.3 μm and 14 μm would have been combinable with Jones et al.'s semiconductor device. One of skill in the art would have had reason to predict (based on its functioning in combination with Iwasa's stacked capacitor memory cell array) that in combination with Jones et al.'s semiconductor device the plurality of dummy semiconductor elements would have continued functioning much as it did in combination with Iwasa's stacked capacitor memory cell array, and that in said combination Jones et al.'s semiconductor device would continue functioning in the manner disclosed by Jones et al. It would therefore have been obvious to a person having skill in the art to modify Jones et al.'s semiconductor device by surrounding the semiconductor element area 120 of Jones et al.'s semiconductor device with a plurality of dummy semiconductor elements, each of the plurality of dummy semiconductor elements including a dummy capacitor which is comprised of a dummy bottom electrode, a second dielectric layer composed of the same material as the first dielectric layer, formed on the dummy bottom electrode, and a dummy top electrode on the second dielectric layer, wherein each of the plurality of dummy semiconductor elements is located so that a space between the electrode and the dummy electrode is in a predetermined range between 0.3 μm and 14 μm , as taught by Iwasa.

Art Unit: 2826

As the *Graham* Court cautions, one may not ignore evidence of secondary considerations, especially “unexpected results.” For evidence of unexpected results one must rely on Applicants. Applicants have actually made the claimed combination. Evidence of differences between results of the actual functioning of the claimed combination and the results of the functioning one of skill in the art would have had reason to predict (i.e., the “expected results”) must necessarily come from one who has actually made the combination. A clear case of unexpected results would be if, in combination, the prior art elements did not in fact perform according to their established functions in a predictable fashion. Such is sometimes referred to as a case of “synergy.” See *Anderson's-Black Rock v. Pavement Co.* 396 U.S. 57, 61 (1969) (note that in *Anderson's-Black Rock* the Court does not actually use the word, “synergy”). However, it is clear from the original *Graham* analysis (*Graham v. John Deere*, 383 US 1, 16; still good law, see *KSR v. Teleflex*, 127 S.Ct. at 1740, 82 USPQ2d at 1395) that any type of unexpected results (and indeed any type of secondary considerations) must be considered.

Applicants' specification, however, does not include any evidence of secondary considerations. Applicants disclose that the claimed combination “may be” made; Applicants do not disclose any unexpected results or, indeed, any results at all.

Claim 17 recites a range limitation on the “remnant polarization” of the capacitor. In accordance with applicant's specification, the examiner interprets “remnant polarization”

Art Unit: 2826

as the lower limit on the polarization of the ferroelectric material of the first dielectric layer, when one takes reasonable care to wind the polarization down through a fair number of hysteresis loops, as is commonly done to reduce residual polarization in a ferroelectric capacitor, by those practicing the ferroelectric capacitor art. There is at least a reasonable basis for believing that the capacitor of the device suggested by Jones et al. and Iwasa would have been inherently capable of being run through hysteresis wind-down to reach the claimed "remnant polarization," namely, the fact that the device suggested by Jones et al. and Iwasa is structurally identical to the invention described by Applicants. See *In re Spada*, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990), (prior art polymers anticipated claimed polymers despite the fact that claims recited "tackiness" while prior art reference described the polymers as "hard and abrasion resistant"), MPEP § 2112 (part III) (a rejection under 35 U.S.C. § 102/103 can be made when the prior art product seems to be identical except that the prior art is silent as to an inherent characteristic), and MPEP § 2112.01 (when the structure recited in the reference is substantially identical to that of the claims, claimed properties or functions are presumed to be inherent).

Note that functional language in a device claim is directed to the device per se, no matter which of the device's functions is referred to in the claim. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) ("[A]pparatus claims cover what a device *is*, not what a device *does*" [emphasis in

Art Unit: 2826

original]), makes it clear that it is the patentability of the device per se which must be determined in a “functional language” claim and not the patentability of the function, and that an old or obvious device alleged to perform a new function is not patentable as a device, whether claimed in “functional language” terms or not. Note that caselaw makes clear that in such cases applicant has the burden of showing that a prior art device that appears reasonably capable of performing the allegedly novel function is in fact incapable of doing so. See *In re King*, 231 USPQ 136 (Fed. Cir, 1986) (“It did not suffice merely to assert that [the cited prior art] does not inherently achieve [the claimed function], challenging the PTO to prove the contrary by experiment or otherwise. The PTO is not equipped to perform such tasks”) and *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977) (claiming a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable). See MPEP § 2114.

In *Ex parte Smith*, 83 USPQ2d 1509 (Bd. Pat. App. & Int. 2007, PRECEDENTIAL), the Board found, “There is nothing in the Specification to indicate that the [property] necessary to render the [claimed structure] [capable of the claimed function] is anything more than the inherent result of constructing the [claimed structure] of standard materials in accordance with claim 35’s other limitations, which are expressly disclosed in [the prior art].” The Board held, “We thus agree with the Examiner that a *prima facie* case of anticipation is established by [the prior art]. Because the Appellant presented no

Art Unit: 2826

evidence to overcome the Examiner's finding of the inherent ability of [the prior art's] [structure] to [perform the claimed function], she failed to meet her burden to overcome that *prima facie* case. We therefore find that claim 35 is anticipated by [the prior art]."

The Board cited *In re King* for the proposition that "[A] *prima facie* case of anticipation [may be] based on inherency," and *In re Best* for the proposition that "Where, as here, the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product," in support if its holding. See *Ex parte Smith*, 83 USPQ2d 1509,1514 (Bd. Pat. App. & Int. 2007). Applicant will please note that the fact one could reasonably expect the prior art to perform the recited function was enough to support a *prima facie* finding that the device claimed by virtue of the recital of said function was identical to (or obvious in view of, as the case may be) the prior art device.

In this case it is reasonable to assume that Jones et al.'s device is capable of the claimed function, because a comparison of Applicant's specification to Jones et al.'s disclosure reveals that Jones et al. discloses a device that is apparently identical to the device Applicant describes as being capable of performing the claimed function.

Art Unit: 2826

Because it is reasonable to assume that Jones et al.'s device is capable of performing the claimed function, the burden shifts to Applicants to show that it are not. See MPEP § 2114.

The applicant's claims 15-18 do not distinguish over the Jones et al. and Iwasa references regardless of the process used to form the multilayer, electrode, dummy electrode, first dielectric layer, second dielectric layer bottom electrode, and dummy bottom electrode, because only the final product is relevant, not the recited process of forming a dielectric film for the first dielectric laver and the second dielectric layer; forming an electrically conductive film on the dielectric film; and etching the electrically conductive film so as to form the electrode and the dummy electrode, etching the dielectric film so as to form the first dielectric layer and the second dielectric layer. See *SmithKline Beecham Corp. v. Apotex Corp.*, 78 USPQ2d 1097 (Fed. Cir, 2006) ("While the process set forth in the product-by-process claim may be new, that novelty can only be captured by obtaining a process claim.")

Note that when "product by process" claiming is used to describe one or more limitations of a claimed product, the limitations so described are limitations of the claimed product per se, no matter how said product is actually made. *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessmann*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); and *In re*

Art Unit: 2826

Marosi et al., 218 USPQ 289, all of which make it clear that it is the patentability of the final product per se which must be determined in a "product by process" claim and not the patentability of the process, and that an old or obvious product produced by a new method is not patentable as a product, whether claimed in "product by process" claims or not. Note that applicant has the burden of proof in such cases, as the above caselaw makes clear. See also MPEP 706.03(e).

The Federal Circuit recently revisited the question of whether a "product by process" claim can be anticipated by a reference that does not recite said process. See *SmithKline Beecham Corp. v. Apotex Corp.*, 78 USPQ2d at 1099-1101. The Federal Circuit cited with approval this Office's current statement of the law, found in MPEP § 2113:

[Even] though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.

Id. at 1101. The Federal Circuit held this statement to be consistent with its own views on this topic, as well as various Supreme Court rulings, notably *Gen. Elec. Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 373 (1938) ("Although in some instances a claim may validly describe a new product with some reference to the method of production, a patentee who does not distinguish his product from what is old except by reference, express or constructive, to the process by which he produced it, cannot secure a monopoly on the product by whatever means produced."). *Id.*

Art Unit: 2826

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas L. Dickey whose telephone number is 571-272-1913. The examiner can normally be reached on Monday-Thursday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on 571-272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



THOMAS DICKEY
PRIMARY PATENT EXAMINER